

Appl. No. 10/549,528
Response dated October 19, 2009
Reply to Advisory Action dated July 21, 2009

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously presented) A method of forming a peptide conjugate comprising a covalent linkage between a modifying group and a glycosylated or non-glycosylated peptide, wherein said modifying group is conjugated to the peptide via a glycosyl linking group interposed between and covalently linked to both said peptide and said modifying group, said method comprising:

a. contacting a cell with a modified sugar comprising a sialic acid moiety covalently functionalized with at least one modifying group, wherein said at least one modifying group is a water-soluble polymer;

b. incubating said cell under conditions in which said cell internalizes said modified sugar;

c. after step b, intracellularly contacting said modified sugar with a glycosylated or non-glycosylated peptide and a glycosyltransferase for which said modified sugar is a substrate, thereby forming said peptide conjugate.

2. (Original) The method of claim 1, further comprising, after step b and before step c, intracellularly contacting said modified sugar with a nucleotide and a nucleotidyl transferase, thereby forming a modified nucleotide sugar, wherein said modified sugar in step c is said modified nucleotide sugar.

3. (Original) The method of claim 1, further comprising isolating said peptide conjugate.

4. (Original) The method of claim 1, wherein said modified sugar is a modified nucleotide sugar.

5. (Original) The method of claim 1, wherein said modified sugar is a modified activated sugar.